

AYUS Sales: Management Information System

Aravinda M¹, Anisha P Rodrigues²

PG Scholar, Department of Computer Science and Engineering, NMAMIT, Udupi, Karnataka, India¹

Assistant Professor, Department of Computer Science and Engineering, NMAMIT, Udupi, Karnataka, India²

ABSTRACT: This paper describes the design and implementation of a Management Information System (MIS) called Ayus Sales. Given the growth of cloud data storage, we now can maintain, manage, backup and access data over a network. However it is still difficult task to maintain all expenditure and sales information when Sales Executive work at various locations, especially when meeting prospects and serving clients. Solution requires development of two different software applications, an android application which is used by Sales Executives and a server application which is hosted on cloud.

KEYWORDS: Management Information System, Android Application, Web Application

I. INTRODUCTION

With the rapid development of technology still there is no solution for maintaining all expenditure details and other information for Sales Executives who work at various locations meeting prospects and serving clients. In this paper, we present a Management Information System [1] which eases the work of both Field Sales Executives and Sales Manager who works for a healthcare company. With the current system, the Field Sales Executives must enter all expenditures and other information's manually in a book. Later he needs to enter and save that information in a computer for the company purpose. Based on the information provided by the Field Sales Executives, Sales Manager of the company will decide cost per sale, cost per meeting, cost per service with various metrics and sales conversion ratio. It is really a lengthy process for both Sales Executives and Sales Manager.

The proposed system eases the work of Sales Executive as well as Sales Manager. Here an android application is provided to the Sales Executive which will be installed in his android device. When Sales Executives of the company work at various locations meeting prospects and serving clients he need to enter all expenditure details and other information's in his android application. Later all data stored in android will be sent to the cloud server. At the same time a server application will be provided to Sales Manager which will track Sales Executives and their expenditures. At the end of the day, it will generate MIS reports like cost per sale, cost per meeting and cost per service with various metrics and sales conversion ratio and sales conversion ratio and also each Sales Executive will get automatic email and mobile notification regarding the sales status.

II. EXISTING SYSTEM

With the existing system Field Sales Executives must enter all expenditures and other information's manually in a book while working at various locations, especially when meeting prospects and serving clients. There is also a risk of losing or missing the information. Later he needs to enter and save that information in a computer for company purpose. Based on the information provided by the Field Sales Executives, Sales Manager of the company will decide cost per sale, cost per meeting, cost per service with various metrics and sales conversion ratio. It is really a lengthy process for both Sales Executives and Sales Manager.

International Journal of Innovative Research in Science, Engineering and Technology

(An ISO 3297: 2007 Certified Organization)

Vol. 5, Special Issue 9, May 2016

III. PROPOSED SYSTEM

We will come up with a tool which will be installed in Sales Executive's android device. Sales Executive must undergo certain login procedures to android application [2] as provided by the Sales Manager. Sales Executives must enter all the expenditures and sales information's in android application provided. All data stored in android will be sent to the cloud server. Analysis of data will be done in the cloud server. A server application, which will provide all information's like cost per sale, cost per meeting, cost per service with various metrics and sales conversion ratio. Sales Manager can insert, edit or delete the trip information saved using web application. At the end of the day each Sales Executives will get automatic email and mobile notification regarding the sales status.

IV. SYSTEM ANALYSIS AND DESIGN

A. System Plan

The overall missions of the Management Information System are as follows: 1. Meet the basic requirements of the Sales Executive of the company. 2. Meet the basic requirements of the Sales Manager of the company. 3. Meet the basic requirements of sales information management. 4. Safe and secure maintenance of sales information.

B. Requirement analysis

There are two types of people to use Ayus sales Management Information System. Here are the functions of two roles in MIS:

- 1) Functionalities available for the Sales Manager:
 - a) Read Sales Information: Sales Manager is provided with daily sales information through web application. He will get the information like workspace, sales reports, executive details, client details, expense details.
 - b) Insert, edit and delete Sales Information: Sales Manager can insert, edit or delete the trip information saved using web application.
- 2) Functionalities available for the Sales Executive:
 - a) Add Trip Information: Sales Executive can create new trip using android application which include details like date, source and destination places with distance in kilometres, name and trip type.
 - b) Add Clients: Sales Executive can add clients using android application which include details like client name, location and contact number.
 - c) Add Notes: Sales Executive can add tip notes with respect to client using android application which include details like client, purpose of client meet, status of meet and any other important information to remember.
 - d) Add Costs: Sales Executive can add trip cost with respect to each trip using android application which includes details like amount spent on, spent for and spent by.
 - e) Read trip information: Sales Executive can read saved trip details, notes and costs using android application.
 - f) Edit trip information: Sales Executive can edit saved trip details, notes and costs using android application.
 - g) Delete trip information: Sales Executive can delete saved trip details, notes and costs using android application.

C. System Design

Sales Executives of the company work at various locations meeting prospects and serving clients. As shown in Figure 1, Sales Executives must enter all expenditure details and other information's in his android application. Later all data stored in android will be sent to the cloud server. At the same time Sales Manager will track Sales Executives and their expenditures through server application. At the end of the day, it will generate MIS reports like cost per sale, cost per meeting, cost per service with various metrics and sales conversion ratio and also each sales executive will get automatic email and mobile notification regarding the sales status.

International Journal of Innovative Research in Science, Engineering and Technology

(An ISO 3297: 2007 Certified Organization)

Vol. 5, Special Issue 9, May 2016

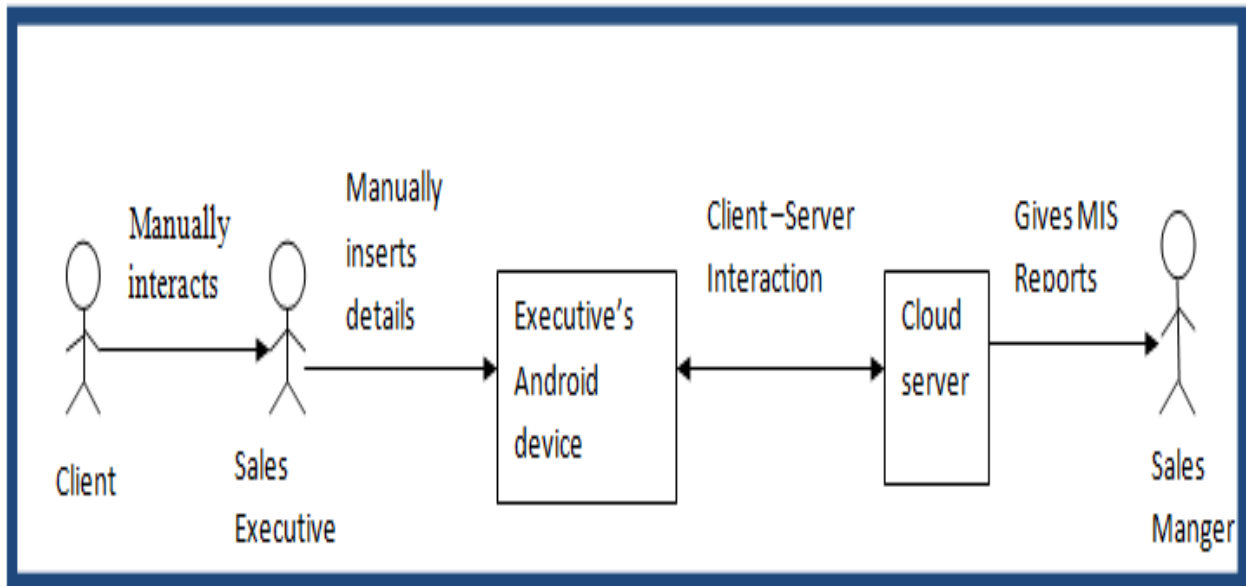


Figure 1: Basic interactions of Client, Sales Executive and Sales Manager

Figure 2 shows working scenario of complete system. Sales Executives must enter all expenditure details and other information's in his android application. This sales information will be stored in local database. When the mobile is connected to the internet data stored in android database will be sent to the cloud server. Analysis of data will be done in the cloud server. Sales Manager will track Sales Executives and their expenditures through server application. At the end of the day, it will generate MIS reports.

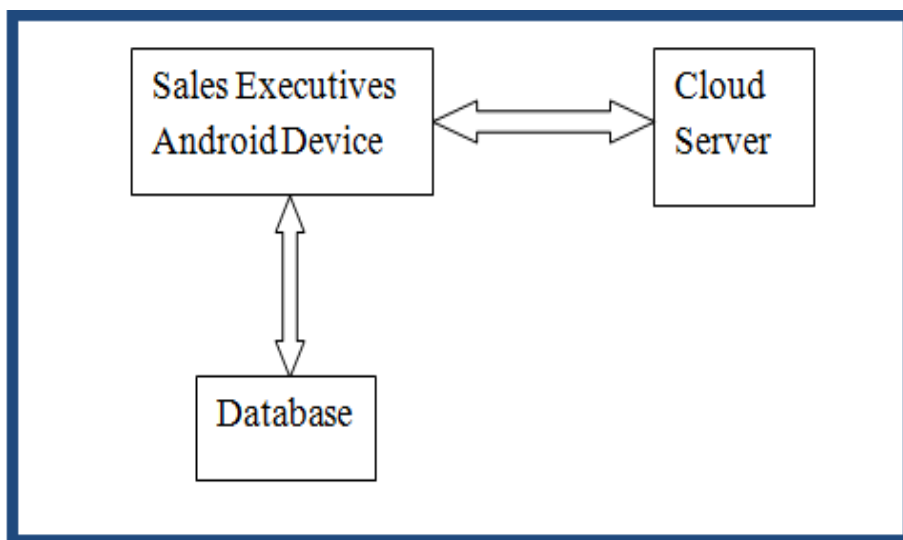


Figure 2: Working Scenario

International Journal of Innovative Research in Science, Engineering and Technology

(An ISO 3297: 2007 Certified Organization)

Vol. 5, Special Issue 9, May 2016

V. WORKING OF ANDROID APPLICATION

A. Login process

Initially android application will be installed in Sales Executive's android device. After that Sales Executive must undergo certain login procedures using the user name and password provided by sales manager. As shows in Figure 3, once he opens the android application it will ask him to turn on the internet connection. Internet connection is must during the login process to verify the user. If the login process is successful it will display the home page.



Figure 3: Login Process to Android Application

B. Create a new trip

As shown in Figure 4, Sales Executive can create a new trip by pressing the plus icon in the home page. In the next page he should enter details of the trip like date, source, destination, distance, trip members and trip type. App user name will be automatically selected by default in trip member field. In case more than one Sales Executives going for a trip, user can add them by ticking their name from the trip member list. Also Sales Executive has to select the type of trip using the dropdown available. Dropdown include options like sale, installation, and service. Once he press the save button it will be redirected to home page with the list of newly created trips. To edit the trip details he needs to click on that particular trip in trip view page. Long pressing of a particular trip in home page will display the trip delete option.



Figure 4: Create a new trip. a) Home page. b) Add new trip page. c) Home page with newly created trips.

C. Add Note

Clicking on a particular trip on home page will display the note and cost page of respective trip. As shown in Figure 5, to add a new note, Sales Executive has to click on the plus icon in notes page. After that he needs to enter the details like client name, purpose, status of the trip and any notes regarding that trip in add new notes page. Client name and status can be selected from the dropdown available. Status dropdown include options like interested, installed, not interested, agreed, signed up, hold. Clicking the save button will display the notes page with newly created notes. To

International Journal of Innovative Research in Science, Engineering and Technology

(An ISO 3297: 2007 Certified Organization)

Vol. 5, Special Issue 9, May 2016

edit the note details entered he needs to click on that particular note in notes page. Long pressing of a particular note in notes page will display the note delete option.



Figure 5: Add notes. a) Notes page. b) Add new notes page. c) Notes page with newly added notes.

D. Add Cost

Clicking on a particular trip on home page will display the note and cost page of respective trip. As shown in Figure 6, to add a new cost Sales Executive has to click on the plus icon in cost page. After that he needs to enter the details like amount, spent on and spent for. User name of android application will be selected automatically in spent by field. Clicking the save button will display the cost page with newly created costs. Also cost page will display the total of all the costs entered. To edit the cost details he needs to click on that particular cost in the cost page. Long pressing of a particular cost in cost page will display the cost delete option.



Figure 6: Add costs. a) Cost page. b) Add new cost page. c) Cost page with newly added costs.

VI. WORKING OF WEB APPLICATION

Sales Manager is provided with the administrator access to the web application. He has to create an account for each of the Sales Executive. Details like mail id, password will be documented. Later he can track Sales Executives and their expenditures using the web application.

As shown in Figure 7, web application provide the information like Workspace, Trip reports, Executives details, Client information, Expense details, Trip details and Trip Notes. Workspace will provide the quick details of recent trips, clients and expenses. Trip Reports will provide details like number of clients met, number of installations done, total expense and the time taken by each and every Sales Executive. Executives will provide the details like last trip, trip members and last expense of each and every Sales Executive. Client will provide details like name, contact number and location of each and every client. Expense will provide details like amount, spent on, spent for, spent by and the date of

International Journal of Innovative Research in Science, Engineering and Technology

(An ISO 3297: 2007 Certified Organization)

Vol. 5, Special Issue 9, May 2016

each and every expense. Trip will provide date, source, destination, distance and trip members of each and every trip. Note will provide details like client name, client location, purpose of trip, status of trip and notes of each and every trip.



Date	From	To	Distance	Member Name			
2016-03-16	Mangalore	Odiyur	60	Rakesh, Vinay Kumar	show	edit	delete
2016-03-17	Mangalore	gulbarga	300	Aravind, Vinay Kumar	show	edit	delete

Figure 7: Web Application

VII. CONCLUSION

The application developed will be profitable which not only eases the work of Sales executive but also the Sales Manager. By offering a better approach to sales management system it provides an efficient, quick and well organized culture. It provides a systematic approach and less work for the sales executive.

REFERENCES

- [1] S.Sadagopan, "Management Information System", PHI Learning, 1997.
- [2] Neil Smyth, "Android studio Development Essentials", CIP Platform, 2015.
- [3] J.F.DiMarzio, "Android a Programmers Guide", Mc Graw Hill, 2008.
- [4] Bill Phillips, Brian Hardy, "Android Programming: The Big Nerd Ranch Guide (Big Nerd Ranch Guides)", Pearson, 2013.
- [5] Dave Smith, Jeff Friesen, "Android Recipes: A Problem-Solution Approach", Paul Manning, 2011.